

MEMORANDUM

DATE: March 25, 1980

SUBJECT: Preliminary Assessment/Site Inspection:
Sanitary Landfill Inc., Cranston, R.I.

FROM: Robert O'Meara, Environmental Engineer
Enforcement Branch

TO: Files

Superfund Records Center

SITE: Cranston SanitaryFACILITY: 1.3OTHER: 584030

SDMS DocID 584030

On March 20, 1980, a review of Rhode Island DEM information concerning Sanitary Landfill Inc. in Cranston, Rhode Island was conducted. A site inspection of the subject disposal site was also conducted. Included below is a summary of my findings:

Site Description

This landfill is a moderately large (47 acres) privately-owned site. Jack Capuano is the president of Sanitary Landfill Inc. and Anthony and Daniel Capuano Jr. are the other officers. A Dun and Bradstreet report of the corporation has been requested. The site has reportedly been active since 1943 and is reported to have accepted unspecified industrial and hazardous wastes besides municipal refuse. The landfill occupies an old sand and gravel pit northwest of the Pawtuxet River (note attachment 1) just above the 100-year flood elevation of the river. The landfill is reported to be underlain on the southeast by glacial outwash deposits of sand and gravel. The outwash deposits thin towards the northwest in the vicinity of Pontiac Avenue and glacial till and shale bedrock are present in the area. The bottom of the landfill is reported to be in the water table. Monitoring well logs indicate a shallow water table ranging in depth from 1.9 to 20 feet. The ground water flow direction is east towards the Pawtuxet River (note attachment 2).

A stream, originating approximately one-quarter mile to the northeast, flows southwestward to the toe of the landfill, then nearly along the entire face of the landfill and beneath the railroad tracks through a culvert to a small pond in the floodplain downgradient from the landfill. There is a direct discharge from the pond to the Pawtuxet River. The stream receives boiler blowdown water from a state institution's power plant.

On-Site Contamination

The R.I. DEM has had a hazardous waste site manifest system in place since March of '78. From a review of the manifest information it appears that the following industries dumped significant quantities of hazardous waste materials on site.

<u>Generator</u>	<u>Hauler</u>	<u>Material</u>
° Ciba/Geigy Corp. Cranston, R.I.		toxic
° Chemart Co. E. Providence, R.I.	Capco Trucking E. Providence, R.I.	toxic
° Great Lakes Container Corp. Coventry, R.I.	D and L Service Coventry, R.I.	toxic
° Speidel/Division of Textron Smithfield, R.I.	A. Capuano Inc. Smithfield, R.I.	toxic
° American Hoechst Corp. Coventry, R.I.	A. Cardi Corp. Coventry, R.I.	toxic

Analysis of on-site monitoring well samples taken by the State on Nov. 7, '79 shows the presence of organic contamination. Note attachment 3 for the location of the on-site monitoring wells.

Included below is a summary of monitoring wells analysis which were performed by the Rhode Island Dept. of Health laboratory.

<u>Constituent Found (ppb.)</u>	<u>Monitoring Well #</u>					
	<u>MW 1-78</u>	<u>MW 2-78</u>	<u>MW 3-78</u>	<u>MW 4-78</u>	<u>MW 5-78</u>	<u>MW 6-78</u>
Benzene✓	58	171				58
Chloroform✓	16	14	13		13	16
Tetrachloroethylene✓	35	14	6		2	35
1-1-1 Trichlorethane				1		
Trichloroethylene✓	150	32	16		5	150
Toluene✓	459	1017	294		72	459
Xylene✓	321	545	87		57	321

Off-Site Contamination

On March 21, '79 the State took surface water samples from four different locations in the stream running parallel to the railroad tracks along the eastern face of the landfill. Note attachment 3 for the location of the sampling points. Analysis of the samples by the State Dept. of Health laboratory shows organic contamination at location S 2 only, where trichloroethylene (31 ppb) and toluene (250 ppb) was detected.

Field Observation

At approximately 2:00 p.m. on March 20, Frank Stevenson of the DEM and myself entered the disposal site. Before entering we met briefly with two of the Sanitary Landfill Inc. officers, Anthony and Daniel Capuano. Entering the site at Pontiac Avenue we walked to the southeast towards the railroad tracks and stream that borders the landfill face.

Partially covered refuse was observed throughout the site and at several locations a strong chemical odor was detected.

The landfill face was observed to be severely eroded at several locations. Discolored water, believed to be landfill leachate was observed in pools at the base of the face and in the stream adjacent to the railroad tracks. Some solid refuse was also observed in the stream.

Potential Remedial Action

Due to the large area, amounts and types of material disposed of and method of disposal utilized at the site, excavation of the site to remove contaminated material would be impractical. If properly designed and engineered, a leachate collection and treatment system, possibly in combination with an impervious cap could form the basis for an effective containment strategy. Off site monitoring wells could be installed to monitor the effectiveness of such a system.

State Enforcement

Sanitary Landfill, Inc.'s license to operate a sanitary landfill as a solid waste management facility was denied on December 7, 1976 on the basis that the site was not being operated in a manner which prevents leachate from deposited refuse from causing or contributing to the pollution of the waters of the state in violation of Regulation II-2. of the State Operating Rules and Regulations for Solid Waste Management Facilities.

Sanitary Landfill, Inc. exercised their right of appeal to this decision and at the conclusion of a June 22, 1977 hearing, Anthony DelGuidice, Department of Health Adjudicative Hearing Officer ordered the facility licensed. The license was issued on June 24, 1977.

On September 10, 1978 the State's Hazardous Waste Management Regulations were promulgated. The regulations required that all disposal facilities that were licensed to accept hazardous waste to submit detailed engineering plans for a system designed for the disposal of hazardous waste. Rather than comply with the requirements the facility ceased accepting hazardous wastes in September of 1978.

Discussions and Recommendations

The site appears to have a good potential for both a CWA 311 cleanup action and a RCRA 7003 enforcement action.

Region I S & A Division, has been requested to conduct an inspection of the facility to assess the potential for a Section 311 cleanup action. During the inspection it is recommended that additional surface water samples be collected from the stream along the south-eastern face of the landfill, from the pond into which the stream empties and at the location where the pond discharges into the Pawtuxet River.

The State, through sampling and analysis of monitoring wells has documented that the groundwater underlying the site contains organic

contamination. The State has also collected and analysed surface water samples from the stream along the southeastern face of the landfill. These results were less conclusive; only one of the four samples collected indicated organic contamination. Additional stream samples taken during S & A's 311 inspection may better define the extent of off-site contamination.

It is recommended that preliminary discussions be held with State, U.S. Attorney and EPA HQ personnel, concerning the initiation of a RCRA 7003 enforcement action against Sanitary Landfill Inc. Since State manifest information is available concerning generators and haulers, the possibility of including them in the proposed enforcement action should also be discussed.

cc: Gerry Levy
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